

DISCOVERY OF THE GENUS *CRATÆPUS* FÖRSTER IN AMERICA, AND THE DESCRIPTION OF A NEW SPECIES.

BY WM. H. ASHMEAD, WASHINGTON, D. C.

In 1878 Dr. Arnold Förster, in his "Kleine Monographie", erected many new genera in the family Chalcididae that have been either overlooked by subsequent entomologists, or, at least, not included in any recent tables of the genera of this family, amongst which is a genus he calls *Cratæpus*, placed by him in the *Tetrastichoide*, and which I am pleased to announce also occurs in America.

The genus has only recently been recognized by me in a re-study of a minute chalcid sent to me some years ago by my Canadian friends, Messrs. James Fletcher and W. Hague Harrington, of Ottawa, who reared it from a Dipterous larva destroying the seeds of the "Canada Thistle" (*Cirsium arvense*, Scop.), and to which I gave the MS. name *Solenotus Fletcherii*, although at the time I felt satisfied it was improperly placed in this Thomsonian genus, as I wrote: "This species exhibits strong Tetrastichid affinities, and the genus, if properly recognized, may ultimately be assigned a position in that sub family."

It is a singular fact, and another illustration of the uniformity of habits of the species of a genus, that *Cratæpus aquisgranensis*, Förster, the type of the genus, and the only other species known, was reared by Förster from *Cirsium lanceolatum*.

The description of the Canadian species is as follows:—

Cratæpus Fletcherii, sp. n.

♀.—Length, 2 mm.; ovipositor half the length of the abdomen. Black, shining; sutures of trochanters, apex of femora, front tibiæ, except extreme tips, apex of middle tibiæ, hind tibiæ, except a blotch at the middle, and the basal joint of all tarsi, dark honey-yellow; rest of legs black. The front femora are lengthened and abnormally thickened, markedly contrasting with the slender and shorter middle femora, while the front tibiæ are remarkably short, and slightly dilated. The very short, black antennæ are inserted low down on the face, apparently only 7-jointed, but in reality 8-jointed, the terminal joint being very minute. Head transverse, a little wider than the collar, the face short; collar large transverse quadrate dorsally, obliquely declining towards the head; mesonotum somewhat broader than the collar, flat above, with two distinct furrows and a depression on its disk; scutellum broader than long with

two grooved lines. Wings as in *Tetrastichus*, the nervures, except the submarginal, dark fuscous. Abdomen sessile, depressed above, boat-shaped beneath and terminating in a strong ovipositor that is fully half the length of the abdomen.

Hab.—Ottawa, Canada.

Bred by Fletcher and Harrington from Dipterous larvæ, destroying the seeds of *Cirsium arvense*, Scop.

CNICUS DISCOLOR AS AN INSECT TRAP.

BY W. S. BLATCHLEY, TERRE HAUTE, INDIANA.

It is a well known fact that certain plants, as *Silene antirrhina*, L., and allied species, exude a sticky, viscid substance on stalk or peduncle for the purpose of preventing ants, small beetles, and other honey-loving intruders, which are too small to aid effectively in fertilization, from creeping up to the flower and robbing the honey-glands of their precious nectar. Other plants, as the Sundews, *Drosera rotundifolia*, L. etc., excrete a similar substance with which they attract insects, which are caught and afterwards utilized as food by the plant.

But no one, as far as the writer can ascertain, has called attention to the fact that one of our common thistles, *Cnicus discolor*, Gray, has along the middle of the outer surface of each of its involucreal scales a large gland whose viscid secretion is poured forth in abundance and is especially attractive to certain species of insects. It is true that Dr. Gray in his Synoptical Flora, p. 402, mentions these glands and uses their presence or absence as characters to aid in the determination of species, but he says nothing of the substance which they secrete.

On various occasions in the autumn of 1891, numerous insects were observed by the writer crowded about the lower involucreal scales of the thistle mentioned, where they were evidently attracted by the excretion there found. A closer examination always revealed that a number of the smaller ones were prisoners, their feet having become entangled in the viscid excretion, which had held them firmly, much as the pollen grains of *Asclepias* hold at times our common honey bee.

On Sept. 14 many flies and a number of specimens of a small green beetle, *Diabrotica longicornis*, Say, which feeds upon the pollen of the thistle flowers, were found thus entangled and were dead, as were also three specimens of *Phalangidæ*. A number of them were so dry as to crumble into powder when touched, showing that they had been prisoners